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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/728,215	12/04/2003	Yi-Lung Cheng	N1085-90166	7974
8933	7590	09/30/2005	EXAMINER	
DUANE MORRIS, LLP IP DEPARTMENT 30 SOUTH 17TH STREET PHILADELPHIA, PA 19103-4196			SCHILLINGER, LAURA M	
			ART UNIT	PAPER NUMBER
			2813	

DATE MAILED: 09/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/728,215	Applicant(s) CHENG ET AL.	
	Examiner Laura M. Schillinger	Art Unit 2813	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 July 2005.  
 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.  
 4a) Of the above claim(s) 11-28 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 1-10 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☐ All b) ☐ Some \* c) ☐ None of:  
 1. ☐ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/25/04; 4/14/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Election/Restrictions*

Claims 11-28 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected claims, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 7/22/05.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 2 contains the trademark/trade name "Black Diamond, CORAL, or HOSP".

Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe the carbon doped SiO<sub>2</sub> film and, accordingly, the identification/description is indefinite.

*Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-10 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by Bencher ('397).

Bencher teaches the following claimed limitations as cited below:

1. A method of depositing a carbon doped SiO<sub>2</sub> film on a substrate, comprising:

(a) providing a substrate (Col.9, lines: 45-50);

(b) flowing oxygen, an inert gas, and one of dimethylsilane (2MS), trimethylsilane (3MS), and tetramethylsilane (4MS) over said substrate(Col.5, lines: 45-55);

(c) generating a plasma to deposit a carbon doped SiO<sub>2</sub> film at certain reaction conditions (Col.5, lines: 45-50); and

(d) continuing said deposition until an acceptable film thickness of said carbon doped SiO<sub>2</sub> film is reached (Col.9, lines: 55-65).

2. The method of claim 1 wherein said carbon doped SiO<sub>2</sub> film is Black Diamond, CORAL, or HOSP (Col.9, lines: 60-68).

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3. The method of claim 1 wherein oxygen is flowed with 3MS and Ar as the inert gas in step (b) (Col.5, lines: 40-55).

4. The method of claim 3 wherein the O<sub>2</sub> flow rate is from about 50 to 300 sccm, the 3MS flow rate is between about 400 and 800 sccm, and the Ar flow rate is between about 50 and 300 sccm (Col.5, lines: 45-60).

5. The method of claim 1 wherein the inert gas is He, Kr, Ne, or Xe (Col.5, lines: 40-60).

6. The method of claim 1 wherein said certain reaction conditions in step (c) are a temperature between about 300 and 400 °C an RF power from about 600 to 800 1 Watts, and a pressure between about 1 .5 and 4 Torr (Col.5-6, lines: 54-5).

7. The method of claim 3 wherein the flow rate ratio of O<sub>2</sub>:Ar:2MS/3MS/4MS is about 1 : 1.5 :6 (Col.5, lines: 45-55).

8. The method of claim 1 wherein the acceptable thickness is from about 4000 to 8000 Angstroms (Col.9, lines: 60-65).

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9. The method of claim 1 wherein steps (b) to (d) are performed in a CVD process chamber (Col.1, lines: 20-25).

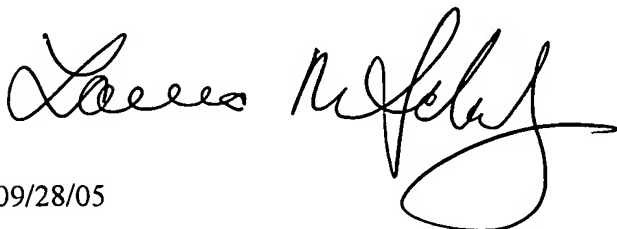
10. The method of claim 1 wherein the deposition rate of said carbon doped SiO<sub>2</sub> film is from about 5000 to 8000 Angstroms per minute (Col.8, lines: 10-20).

### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura M. Schillinger whose telephone number is (571) 272-1697. The examiner can normally be reached on M-T, R-F 7:00-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carl W. Whitehead, Jr. can be reached on (571) 272-1702. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Laura M Schillinger  
Primary Examiner  
Art Unit 2813

09/28/05